

Title (en)
SHOCK ABSORBER FOR WHEELED VEHICLES

Title (de)
STOSSDÄMPFER FÜR RADFAHRZEUGE

Title (fr)
AMORTISSEUR POUR VÉHICULES À ROUES

Publication
EP 4070974 A1 20221012 (EN)

Application
EP 22166850 A 20220405

Priority
IT 202100008516 A 20210406

Abstract (en)
Shock absorber (1) for a wheeled vehicle, or for a seat (200) of a vehicle, comprising at least one fluidic damper (2) constrainable between at least one wheel (49), or the seating (201) of said seat (200), and the frame of said vehicle and equipped with a cylinder (21) and a piston (24) sliding within said cylinder, and at least one gas spring (26) functionally combined with said at least one fluidic damper (2) and acting for at least part of the stroke of said piston with respect to said cylinder, wherein said cylinder (21) comprises a first chamber (22) and a second chamber (23) and that said piston (24) slides within said cylinder (21) thus varying the dimensions of said first chamber and said second chamber, said fluidic damper further comprising a rod (40) integrally combined with said piston (24) and adapted to make said piston slide inside said cylinder (21), characterized in that said rod (40) is equipped with an inner housing (32) in which said at least one gas spring is housed, and in that said gas spring is functionally combined with said at least one second chamber (23) and/or said at least one first chamber of said cylinder (21).

IPC 8 full level
B60G 15/12 (2006.01); **F16F 9/06** (2006.01); **F16F 9/342** (2006.01); **F16F 9/48** (2006.01)

CPC (source: EP)
B60G 15/12 (2013.01); **F16F 9/063** (2013.01); **F16F 9/067** (2013.01); **F16F 9/46** (2013.01); **B60G 2202/30** (2013.01)

Citation (applicant)
• EP 2903840 B1 20181205 - GIULIANI FEDERICO [IT], et al
• CN 108775368 A 20181109 - SHANDONG WANTONG HYDRAULIC CO LTD
• US 7753179 B2 20100713 - ROBERTSON GRAEME KERSHAW [AU]
• US 8899560 B2 20141202 - ALLEN MARK M [US], et al

Citation (search report)
• [X1] CN 108775368 A 20181109 - SHANDONG WANTONG HYDRAULIC CO LTD
• [X1] US 7753179 B2 20100713 - ROBERTSON GRAEME KERSHAW [AU]
• [A] US 8899560 B2 20141202 - ALLEN MARK M [US], et al
• [A] EP 1111266 A2 20010627 - DRAFTEX IND LTD [GB]

Cited by
EP4438350A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 4070974 A1 20221012; EP 4070974 B1 20241106; IT 202100008516 A1 20221006

DOCDB simple family (application)
EP 22166850 A 20220405; IT 202100008516 A 20210406